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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/576,550 | 04/19/2006 | Ichirou Satou | 40221 | 3769 |

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| EXAMINER | |
|---|---|
| STONE, ROBERT M | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2629 | |

| NOTIFICATION DATE | DELIVERY MODE |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/576,550 | SATOU ET AL. | |
| | Examiner | Art Unit | |
| | ROBERT STONE | 2629 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *01 June 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

5)☒ Claim(s) *11-14* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *11-14* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on 1 June 2011 has been entered and considered by the examiner.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by *Kashu* (US 2002/0019249).

As to **claim 11**, *Kashu* (Figs. 1, 3, 7, 8) discloses a mobile terminal apparatus (portable telephone [abstract; 0007]) comprising:

a display portion (LCD 18 and backlight 19) which is driven by a driving voltage applied thereto (LCD 18 and backlight 19 are driven according to signals applied by the control circuit 15 as well as the image information required for display [0008,0010,0015,0016,0036-0038); and

a display portion driving control unit (control circuit 15 controls driving and on/off status of the LCD 18 and backlight 19 for displaying images on the device [0051,0056, 0008]) which changes driving operation of the display portion including at least one of a drive system of the display portion and a driving frequency of the display portion (turns the LCD 18 and/or the LCD backlight 19 ON/OFF [abstract; 0010,0015,0016,0036-0038]),

wherein the display portion driving control unit changes at least one of the drive system of the display portion and the driving frequency of the display portion based on whether the apparatus itself is in a voice communication mode or a voice playback mode (turns the LCD 18 and/or the LCD backlight 19 ON/OFF based on the detection of a voice signal signifying that the device is in a communicating mode [abstract; 0009-0017,0021-0022,0035-0038,0052]).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kashu* (US 2002/0019249) in view of *Fujiyoshi* (US 6,211,854).

As to **claim 12,** *Kashu* does not expressly disclose wherein the display portion driving control unit changes the drive system so as to drive the display portion by sequential scanning when a movie display is performed, and to drive the display portion by interlaced scanning when another display is performed.

*Fujiyoshi* (Figs. 2-9) discloses display driving wherein a display driving control unit changes the drive system so as to drive the display portion by sequential scanning when a movie display is performed, and to drive the display portion by interlaced scanning when another display is performed (moving-image/still-image determination circuit 11 checks the incoming image signal to determine if it's still or moving data and if the data is a moving image, sequential scanning is performed and if the data is a still image, interlaced scanning is performed [col. 6, lines 34-49]).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to have varied display drive scanning as taught by *Fujiyoshi* in the mobile terminal of *Kashu*. The suggestion/motivation would have been to provide sufficiently high-quality images without defects such as lag while additionally providing reduced power consumption [col. 4, lines 43-50].

As to **claim 14,** *Kashu* does not expressly disclose wherein the display portion driving control unit changes the drive system of the display portion into interlaced scanning or frame inversion when the apparatus itself is in a standby state.

*Fujiyoshi* (Figs. 2-9) discloses display driving wherein the display portion driving control unit changes the drive system of the display portion into interlaced scanning or frame inversion when the apparatus itself is in a standby state (interlaced scanning is performed when a still/inactive image with no moving parts is to be displayed [col. 6, lines 34-49]).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to have performed interlaced scanning in a standby state as taught by *Fujiyoshi* in the mobile terminal of *Kashu*. The suggestion/motivation would have been to provide reduced power consumption [col. 1, lines 9-12; col. 2, lines 11-12; col. 4, lines 43-50].

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kashu* (US 2002/0019249) in view of *Fujiyoshi* (US 6,211,854) and *Yamazaki* (US 6,809,774).

*Kashu* does not expressly disclose wherein the display portion driving control unit changes the drive system so as to drive the display portion by sequential scanning in a camera mode for operating a camera, and to drive the display portion by interlaced scanning in another operation mode.

*Fujiyoshi* discloses display driving wherein the display portion driving control unit changes the drive system so as to drive the display portion by sequential scanning during moving image display operation, and to drive the display portion by interlaced scanning during still image display operation (moving-image/still-image determination circuit 11 checks the incoming image signal to determine if it's still or moving data and if the data is a moving image,

sequential scanning is performed and if the data is a still image, interlaced scanning is performed [col. 6, lines 34-49]).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to have varied display drive scanning as taught by *Fujiyoshi* in the mobile terminal of *Kashu*. The suggestion/motivation would have been to provide sufficiently high-quality images without defects such as lag while additionally providing reduced power consumption [col. 4, lines 43-50].

*Kashu* in view of *Fujiyoshi* does not expressly disclose wherein the moving image display operation is during a camera mode.

*Yamazaki* (Figs. 5, 8) discloses a mobile terminal apparatus (portable watch with camera and display [abstract]) comprising a display (72/74) which displays moving images during a camera mode [col. 7, line 58-col. 8, line 16.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to have displayed moving images during a camera mode as taught by *Yamazaki* in the mobile terminal of *Kashu* as modified by *Fujiyoshi.* The suggestion/motivation would have been to provide a "viewfinder" for the user to see a real-time angle of view of what is to be recorded.

### ***Response to Arguments***

7. Applicant's arguments filed 1 June 2011 have been fully considered but they are not persuasive.

a. Regarding newly amended claim 11, Applicant submitted that *Kashu* does not teach "the display portion driving control unit changes at least one of the drive system of the display portion and the driving frequency of the display portion based on whether the apparatus itself is in a voice communication mode or a voice playback mode" because "turning ON/OFF the display or backlight does not result in changing the drive system or the driving frequency of the display". Examiner respectfully disagrees. *Kashu* teaches wherein the display portion driving control unit changes at least one of the drive system of the display portion and the driving frequency of the display portion based on whether the apparatus itself is in a voice communication mode or a voice playback mode (turns the LCD 18 and/or the LCD backlight 19 ON/OFF based on the detection of a voice signal signifying that the device is in a communicating mode [abstract; 0009-0017,0021-0022,0035-0038,0052]).

Therefore, since *Kashu* teaches turning ON/OFF the display or the backlight as Applicant concedes, it teaches altering the driving system in two ways. First, since the backlight is part of the driving system and driven along with the LCD, turning it off when in a voice communication mode changes the driving system such that the display is no longer easily viewable. Secondly, turning the display itself ON/OFF, as is also mentioned by *Kashu*, changes the driving system from an ON state (driving the display to display images) to an OFF state (displaying nothing with no driving).

b. Regarding claim 12, Applicant submits that the motivation relied upon for combining the references of *Kashu* and *Fujiyoshi* is insufficient because "*Fujiyoshi* does not teach that using sequential scanning during movie display would achieve power savings". Examiner respectfully disagrees. *Fujiyoshi* (Figs. 2-9) was relied upon to teach display driving wherein a display driving control unit changes the drive system so as to drive the display portion by sequential scanning when a movie display is performed, and to drive the display portion by interlaced scanning when another display is performed (moving-image/still-image determination circuit 11 checks the incoming image signal to determine if it's still or moving data and if the data is a moving image, sequential scanning is performed and if the data is a still image, interlaced scanning is performed [col. 6, lines 34-49]). At the time of invention, it would have been obvious to a person of ordinary skill in the art to have varied display drive scanning as taught by *Fujiyoshi* in the mobile terminal of *Kashu.* The suggestion/motivation would have been to provide sufficiently high-quality images without defects such as lag while additionally providing reduced power consumption [col. 4, lines 43-50].

While *Fujiyoshi* may not teach reduced power consumption during the period of sequential scanning as pointed out by the Applicant, it does teach reduced power by not driving sequentially at all times. Fujiyoshi changes driving schemes between sequential and interlaced where sequential is used during movie display to prevent image defects such as lag as previously cited. Therefore, as stated by the Examiner, the motivation to combine the varied

driving of *Fujiyoshi* with the mobile terminal of *Kashu* would have been to provide higher quality images without defects such as lag (via sequential driving for movie display) while also maintaining reduced power consumption (via interlaced driving for still images).

## *Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT STONE whose telephone number is (571)270-5310. The examiner can normally be reached on Monday-Friday 9 A.M. - 4:30 P.M. E.S.T. (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on (571)272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M Stone/
Examiner, Art Unit 2629

/CHANH NGUYEN/
Supervisory Patent Examiner, Art Unit 2629